

## Rain Shoe Connected with Rain Outfit

### BACKGROUND OF THE INVENTION

#### 1) FIELD OF THE INVENTION

5           A rain shoe connected with a rain outfit mainly has a raincoat bottom portion capable of completely covering a user's legs for preventing rain immersion; when not in use, the present invention is rolled upwardly to be received at the lower aspect of the raincoat for facilitating the application.

#### 2) DESCRIPTION OF THE PRIOR ART

10           FIG. 1 show the actual application status of a conventional raincoat and rain gaiter. As indicated, a conventional raincape (10) is put on a user's upper body without using extra rain clothes or trousers. As indicated in FIG. 2, a conventional two-piece raincoat (20) includes a top (21) and a pair of rain trousers (22) worn respectively on the user's upper and lower bodies. In  
15           addition, rain gaiters (30) shown are directly slipped on the outside of the user's shoes or boots to fit with the raincoat.

          Both of the raincoats shown in the abovementioned FIGS. 1 and 2 are unable to connect with rain gaiters (30). The main reason is that forcefully connecting the rain gaiter (30) with the raincape (10) or the rain trousers (22)  
20           causes inconvenience in the procedure of putting on and getting off. More

particularly, that causes inconvenience in movement when the rain is light and it is no need to put on the rain gaiters (30). Therefore, the available raincape (10) and two-piece raincoat (20) are sold separately from the rain gaiters (30); the user has to purchase and pay for each. Even they are bought at the same  
5 time, the user is still unable to use them by connecting the rain gaiters (30) with the raincape (10) or the rain trousers (22).

The conventional raincoat doesn't connect with a pair of rain gaiters for application. In addition to the shortcoming of being inconvenient for putting on, taking off and moving, the conventional raincoat has the following drawbacks  
10 as well:

1. The raincoat and the rain gaiters are two different products or even made by different manufactures. The fixed manufacture cost causes a high sale price of the product and that becomes an extra burden for a consumer.
- 15 2. Since the rain gaiters are not connected to the raincoat, sometimes it is hard to find one of them if there are not stored together; it is also possible that one of the rain gaiters is misplaced.
3. When it is drizzling, to put on only the raincoat is enough.  
20 However, when it pours suddenly, the rider has to stop riding

and park on the sideway, open the backpack or the compartment to get out and put on the rain gaiters. That procedure takes time and the temporary stop might cause traffic jam as well as affect life safety. Especially, in some developing countries, when a great number of motorcycles riding in the streets, suddenly parking on the sideway is very dangerous.

4. With the raincoat and the rain gaiters on, as the rider bends the legs and steps on the pedals, the lower edge of the raincoat covers at the upper aspect of the rain gaiters can slightly prevent the rain. However, while waiting for the green light, the rider needs to stretch the legs onto the ground surface for supporting the weight of the motorcycle. Since the raincoat and the rain gaiters are not connected, a gap exists between the lower edge of the raincoat and the upper aspect of the rain gaiters, as shown in FIG. 1, and allows the rainwater to immerse or pour directly into the rain gaiters thereby soaking the shoes and socks inside the rain gaiters.

In view of the abovementioned shortcomings, the inventor of the present

invention researched and designed a rain shoe connected with a rain outfit to solve the problem of wearing the conventional raincoat and rain gaiters separately as well as the unachieved objective of effectively preventing the rainwater.

## 5 SUMMARY OF THE INVENTION

Specifically, the present invention provides a rain shoe connected with a rain outfit to be accessed conveniently at any time and capable of preventing the rainwater completely. The present invention mainly comprises a pair of extension portions, connection portions, gaiters and at least one receiving  
10 device; wherein, the extension portions are disposed at the lower aspect of a raincape or a pair of rain trousers opposite the positions of a user's legs for joining the connection portions. Therefore, the connection portions extend from the bottom portions of the raincape or the rain trousers to cover the user's crura; the gaiters join the lower aspect of the connection portions for covering the  
15 user's feet thereby completely cover the user's legs. The receiving device is disposed at a proper position at the lower aspect of the raincape or the rain trousers; when the user's legs need no covering, the extension portions, the connecting portions and the rain gaiters are rolled upwardly into the receiving device fixed at the lower aspect of the raincape or the rain trousers.

The applications of the present invention of a rain shoe connected with a rain outfit are described as followings for further understanding of the effects thereof:

1. When not in use, the extension portions, the connection portions and the gaiters are accommodated at the lower aspect of the raincape or the rain trousers to prevent misplacement.
2. When it is necessary to wear the raincoat but not cover the legs, the extension portions, connection portions and the gaiters are stored fixedly to prevent inconvenience to the user's movement.
3. When it is necessary to use the present invention of the rain shoe connected with a rain outfit while wearing the raincoat, the user quickly takes out the extension portions, connection portions and the gaiters to cover the leg and foot portions thereby achieving the effect of a convenient access.
4. When it is pouring, since the present invention connects with the raincape or the rain trousers into one unit, no gap existing inbetween thereby preventing the rainwater immersion from soaking the socks and shoes.

Furthermore, when riding the motorcycle or the bicycle, the user's legs might stretch or bend alternatively. If the length of the connection portion covering on the crus is fixed, it affects the smoothness of the alternative stretching or bending leg movement, as shown in FIG. 2. Therefore, the embodiment of the present invention has the connection portion designed as a retractable or extendable structure for facilitating the stretching and bending movement of the legs. That is another objective of the present invention.

To enable a further understanding of the technical contents and effectiveness of the present invention, the brief description of the drawings below is followed by the detailed description of the preferred embodiment.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic drawing of the structure of a conventional raincape.

Figure 2 is a schematic drawing of the structure of a conventional two-piece raincoat.

Figure 3 is a schematic drawing of an exemplary embodiment of storing the present invention connected with a raincape.

Figure 4 is a schematic drawing of an exemplary embodiment of applying the present invention onto the raincape.

Figure 5 is a structural drawing of the exemplary embodiment of the present invention onto the two-piece raincoat as shown in Figure 4.

Figure 6 is a schematic cross-sectional drawing of an exemplary embodiment of applying the present invention onto a pair of rain trousers.

5        Figure 7 is a partially enlarged and schematic cross-sectional drawing of the connection between a receiving device and an extension portion shown in Figure 6.

Figure 8 is a partially enlarged and schematic drawing of the storage shown in Figures 6 and 7.

10        Figure 9 is a drawing of an exemplary embodiment of a gaiter of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

As indicated in FIGS. 3 and 4, the present invention mainly comprises a pair of extension portions (40), connection portions (50), gaiters (60) and at least one receiving device (70); wherein, the extension portions (40) are disposed at the lower aspects of a raincape (10) opposite the positions of a user's legs for joining the connection portions (50) to extend from the bottom portions of the raincape (10) to cover the user's crura; the gaiters (60) join the lower aspect of the connection portions (50) for covering the user's feet thereby completely covering the user's legs when the user wears the raincape (10). The

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receiving device (70) is disposed at a proper position at the lower aspect of the raincape (10); when the user's legs need no covering, the extension portions (40), the connection portions (50) and the gaiters (60) are rolled upwardly into the receiving device (70) fixed at the lower aspect of the raincape (10) so as to  
5 achieve the objective of applying conveniently.

As indicated, in order to corresponding to the alternative movement of stretching and bending legs when the user rides the motorcycle or the bicycle, the connection portion (50) is made of the retractable or expandable structure for providing sufficient space for the user's leg movements to prevent  
10 discomfort. The expandable structure of the connection portion (50), as shown in FIGS. 4 and 5, mainly comprises a circular inner layer soft liner (54) and a circular outer layer waterproof fabric (55); wherein, the inner soft liner (54) is located between the inner periphery of the outer layer waterproof fabric (55) and the user's leg portion. The length of the inner soft liner (54) fits with that  
15 of the outer layer waterproof fabric (55), the top end thereof and the outer waterproof fabric (55) are sewn fixedly and the bottom end thereof connects fixedly with the upper rim of the gaiter (60).

The top end of the outer waterproof fabric (55) is disposed with the extension portion (40), the bottom end thereof is in an open state and circles



around the outer periphery of the gaiter (60) but not connects with the gaiter (60).

Furthermore, tie bands (61) are disposed at the ankle portion of the gaiter (60). The tie bands (61) are tightened up after the gaiter (60) is put on the user's foot to prevent the gaiter (60) from sliding downwardly. In embodiment,  
5 the tie bands (61) are hook and loop straps.

When putting on the embodiment, the length of the inner layer soft liner (54) is about the same length of the outer layer waterproof fabric (55); the bottom end of the outer layer waterproof fabric (55) extends to cover the height  
10 of the bottom portion of the gaiter (60); the bottom end of the inner soft liner (54) connects with the height of the top end of the gaiter (60). Since the bottom end of the inner soft liner (54) has the length about the same of the outer waterproof fabric (55) but different height position from that of the outer layer waterproof fabric (55), the connection portion between the bottom portion of  
15 the inner soft liner (54) and the upper rim of the gaiter (60) forms a folded state.

When in use, the bending of the user's knee slightly pulls the entire connection portion (50) upwardly. However, since the length of the outer layer waterproof fabric (55) is designed to extend to the bottom portion of the gaiter (60), as the connection portion (50) slightly displaces upwardly, the lower rim

thereof still completely cover the top portion periphery of the gaiter (60); that provides the allowance for the inner layer soft liner (54) to displace upwardly.

Therefore, the inner soft liner (54) achieves the objective of expanding upwardly without causing tightness and discomfort to the user.

5           Furthermore, the inner layer soft liner (54) is preferably made of soft nylon material. Therefore, the folding on the bottom portion does not discomfort the user; in addition, it absorbs less water. For example, some of the sports jackets and cagoules have the mesh type inner liner which is the adoptable material for the inner soft liner (54).

10           As indicated in FIGS. 3 and 4, the receiving device (70) is disposed at a proper position at the lower aspect of the raincape (10); in embodiment, it is manufactured as a pocket shape sewn fixedly at the lower rim of the raincape (10). When the connection portion (50) retracts to the smallest size and folds, it is placed into the pocket-shaped receiving device (70).

15           The abovementioned exemplary embodiment is for the present invention applied to a raincape (10). Actually, the present invention can be applied to rain trousers (22) a two-piece raincoat (20) as well and the embodiment thereof is described as follows.

            As indicated in FIG. 5, 6, 7, the greatest difference between wearing the  
20   pair of trousers (22) and the raincape (10) is that the lower edge of the raincape

(10) covers the user's leg portions, but the rain trousers (22) wraps cylindrically around the user's leg portions. In order to fit the circular rain trouser (22), it is preferred to design the members of the extension portion (40) into circular shapes so as to completely wrap the leg portions exposed at the lower aspect of the rain trousers (22) to ward off the rainwater. It is also preferred that the periphery of the receiving device (70) fixedly connects with the lower edge of the rain trousers (22); the pocket thereof extends along the circumference of the rain trousers (22) at 360 degrees such that the extension portion (40), the connection portion (50) and the gaiter (60) are stored in the receiving device (70). In addition, the gaiter (60) connected at the lower aspect of the connection portion (50) is disposed with an opening (62) to allow the user to pull the feet therefrom. Furthermore, the circumference of the receiving device (70) is connected fixedly to the outer side on the lower edge of the rain trouser (22); the receiving device (70) is divided into an upper flap (71) and a lower receiving pocket (72); the upper flap covers (71) covers the opening of the lower receiving pocket (72).

The entire extension portion (40) is in a cylindrical shape and the upper edge thereof is disposed inside a lower receiving pocket (72) whereby making the extension portion (40) extend downwardly from the lower edge of the rain

trousers (22), wherein, the connection portion (50) connect with the lower aspect of the extension portion (40).

As shown in Fig.6, when using the gaiter (60), first the extension portion (40), the connection portion (50) and the gaiter (60) are taken out of the lower receiving pocket (72); then the extension portion (40) and the connection portion (50) are put on the user's leg portion; then the user's foot goes into the gaiter (60) through the opening (62) such that the user's leg portions and feet are completely shielded into the gaiter (60) through the unconnected area between the top portion of the gaiter (60) and the connection portion (50) so as to achieve the objective of applying conveniently.

In addition, the opening (62) can be disposed at the bottom portion of the gaiter (60); the top portion of the gaiter (60) extends directly from the lower aspect of the connection portion (50). For storing, it is merely necessary to directly open the opening (62) to fold upwardly; for using, the extension portion (40), the connection portion (50) and the gaiter (60) are pulled out from the lower receiving pocket (72) to put the extension portion (40) and the connection portion (50) on the user's leg portion as well as stretch the user's foot into the gaiter (60) through the opening (62).

Furthermore, as shown in FIG.9, the gaiter (60) can be made in a shape, covering user's feet function of the connection portion (50) is another feature

of the present invention; cooperating with the gaiter (60), it can be applied to other waterproof outfits.

It is of course to be understood that the embodiment described herein is merely illustrative of the principles of the invention and that a wide variety of  
5 modifications thereto may be effected by persons skilled in the art without departing from the spirit and scope of the invention as set forth in the following claims.